# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# MONITORING AND REPORTING ORDER NO. R5-2010-0833 CALIFORNIA WATER CODE SECTION 13267 FOR CROP PRODUCTION SERVICES, CLAUS ROAD MODESTO FACILITY STANISLAUS COUNTY

This Order is issued to Crop Production Services (hereafter Discharger) pursuant to California Water Code section 13267, which authorizes the Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board) to issue a Monitoring and Reporting Order (Order).

The Executive Officer finds:

#### INTRODUCTION

- 1. Crop Production Services, formerly Western Farm Services, operates a retail fertilizer facility at 3348 Claus Road in Modesto (Site), Stanislaus County.
- 2. Historical operations at the site have resulted in release of nitrogen, fumigants, and pesticides to groundwater, which is first encountered between about 35 and 55 feet below ground surface. This pollution has impaired the beneficial use of groundwater resources at the Site.
- 3. In 2004 and 2006, Western Farm Service removed soil source areas containing pollutants, and in 2006 graded the site, installed stormwater basins, and underlaid the operations areas with an engineered liner and asphalt.
- 4. This Monitoring and Reporting Order (Order) is issued by the Central Valley Water Board, pursuant to California Water Code (CWC) section 13267 and is necessary to delineate groundwater pollutant plumes and to determine whether remediation efforts are effective.
- 5. Existing data and information about the Site show the presence of various chemicals, including nitrate, ammonium, bromacil, 1,2-dichloropropane, and 1,2,3-trichloropropane emanating from the property resulting from the Discharger's past operation. The Discharger is responsible for the discharge because it operates a retail fertilizer facility at this Site.
- The Discharger shall not implement any changes to this Order unless and until a revised Monitoring and Reporting Order is issued by the Executive Officer. This Order replaces the requirements listed in Order No. R5-2008-0816, which was issued on 25 July 2008.
- 7. Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

#### **LEGAL PROVISIONS**

#### 8. CWC section 13267 states, in part:

(b)(1) In conducting an investigation, the Regional Board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The reports required herein are necessary for the reasons described in this Order, to assure protection of waters of the state, and to protect public health and the environment.

#### 9. CWC section 13268 states, in part:

- (a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267 . . . or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).
- (b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Failure to submit the required reports to the Central Valley Water Board according to the schedule detailed herein may result in enforcement action(s) being taken against you, which may include the imposition of administrative civil liability pursuant to CWC section 13268. Administrative civil liability of up to \$1,000 per violation per day may be imposed for non-compliance with the directives contained herein.

#### **REQUIRED ACTIONS**

**IT IS HEREBY ORDERED** that, pursuant to California Water Code section 13267, Crop Production Services shall conduct monitoring and reporting in compliance with the following:

### **Monitoring Specifications**

1. The Discharger shall implement monitoring according to the schedules shown in Tables 1 and 2. As shown in Figure 1, there are 10 monitoring wells in the first water-bearing zone (A-Zone wells MMW-01R, MMW-02, MMW-03, MMW-13, MMW-14, MMW-16, MMW-17, MMW-18, MMW-19, and MMW-21), three monitoring wells in the second water-bearing zone (B-zone wells MMW-20, MMW-22, and MMW-23), one well in the third water-bearing zone (C-zone well MMW-15), and an off-site water supply well at Starr Lumber (MDW-06) associated with the site. This Monitoring Order applies to these 14 monitoring wells, the Starr Lumber supply well and any monitoring wells installed subsequent to the issuance of this Order. The Discharger shall collect samples using standard Environmental Protection Agency (EPA) protocol.

Table 1. Monitoring Frequency<sup>1</sup> for A-Zone Monitoring Wells

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A-Zone Wells	MMW-01R	MMW-02	MMW-03	MMW-13	MMW-14	MMW-16	MMW-17	MMW-18	MMW-19	MMW-21
Groundwater Elevation	S	S	S	S	S	S	S	S	S	S
Nitrate + Nitrite (as N)	S	S	S	s	S	S	S	S		S
Ammonium	S	S	S	S	S	S	S	S		
Fumigants (EDB, DBCP)	S	S	S	s	S	S	S	S		S
1,2,3-trichloropropane	S	S	В,	В	S	В	В	Α		S
Triazine Pesticides		В						В		
Volatile Organic Compounds	Α		Α	Α		Α	Α	А		Α

 $<sup>^{1}</sup>$  S = Semi-annually, in the  $2^{nd}$  and  $4^{th}$  quarters (April-June, and October-December).

Table 2. Monitoring Frequency<sup>1</sup> for B-Zone, C-Zone, and Water Supply Well

B-zone, C-zone and Water Supply Well	MMW-20 (B-zone)	MMW-22 (B-zone)	MMW-23 (B-zone)	MMW-15 (C-zone)	Starr Lumber Supply Well
Groundwater Elevation	Α	A	А	В	
Nitrate + Nitrite (as N)	A				В
1,2,3-trichloropropane					В

See Footnotes on following page.

A = Annually in the 2<sup>nd</sup> quarter (April-June).

B = Biennially, odd numbered years in 2<sup>nd</sup> quarter.

#### Footnotes to Table 2.

- <sup>1</sup> A = Annually in the 2<sup>nd</sup> quarter (April-June).
  - B = Biennially, odd numbered years in 2<sup>nd</sup> quarter.
- 2. The Discharger shall analyze samples according to standard Environmental Protection Agency (EPA) protocol using the methods shown in Table 3.

**Table 3. Analytical Methods** 

	Analytical Method	Maximum Detection Limit <sup>1</sup> 0.1 mg/L		
Nitrate + Nitrite (as N)	SM4500			
Ammonium	SM4500	0.1 mg/L		
Fumigants (EDB, DBCP)	EPA 504.1	0.02 ug/L		
1,2,3-trichloropropane <sup>2</sup>	EPA 504.1 SRL 524M	0.02 ug/L 0.005 ug/L		
Triazine Pesticides (including bromacil)	EPA 507	0.1 ug/L		
Volatile Organic Compounds	EPA 8260B	1 ug/L		

<sup>&</sup>lt;sup>1</sup> For nondetectable results. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

3. Monitoring wells with free product or a visible sheen (if applicable) shall be monitored at a minimum for product thickness and depth to water.

## **Reporting Specifications**

- 4. When reporting data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible and shall summarize the data in such a manner as to illustrate clearly the compliance with this Order.
- 5. As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, a registered professional or their subordinate shall prepare and sign all reports.
- 6. **Semi-annual** electronic reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, shall be submitted electronically over the internet to the State Water Resources Control Board Geotracker database system by **1 February**, **and 1 August**, until such time as the Executive Officer determines that the reports are no longer necessary.

<sup>&</sup>lt;sup>2</sup> If 1,2,3-trichloropropane is not detected using Method SRL 524M for two consecutive monitoring events, then EPA Method 504.1 may be used and the monitoring frequency may be reduced to Annually in the 2<sup>nd</sup> guarter (April-June).

- 7. **Semi-annual** paper copy reports shall be submitted to this Central Valley Water Board office by **1 February**, **and 1 August**, until such time as the Executive Officer determines that the reports are no longer necessary. Each report shall include the following minimum information:
  - (a) A description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated.
  - (b) Field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.
  - (c) Groundwater contour maps for all groundwater zones, if applicable.
  - (d) Figures for all groundwater zones with summaries of analytical results posted next to respective monitoring wells.
  - (e) A table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom.
  - (f) A table showing historical lateral and vertical (if applicable) flow directions and gradients.
  - (g) Cumulative data tables for all major constituents of concern containing the water quality analytical results and depth to groundwater for all monitoring wells for the past five years, if applicable. A copy of the laboratory analytical data report shall be provided. It may be provided on CD or DVD and must be included in the report. The Central Valley Water Board may request additional data as necessary.
  - (h) If applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system.
  - (i) If applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.

- 8. An Annual Report shall be submitted to the Central Valley Water Board by

  1 February of each year. This report shall contain an evaluation of the effectiveness
  and progress of the investigation and remediation, and may be substituted for the
  second semi-annual monitoring report, provided that all information that must be
  submitted in the semi-annual report is included along with the following minimum
  information:
  - (a) Graphical time series plots of groundwater elevations and nitrate concentrations.
  - (b) Groundwater contour maps containing all groundwater elevation data obtained in the first water bearing zone during the past two monitoring events.
  - (c) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
  - (d) A description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness.
  - (e) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
  - (f) If applicable, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
- The results of any monitoring done more frequently than required at the locations specified in the Monitoring Order also shall be reported to the Central Valley Water Board.
- 10. The Discharger shall implement the above monitoring program as of the effective date of the Order.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with CWC section 13320 and California Code of Regulations, Title 23, Sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day.

Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality or will be provided upon request.

This Order is effective upon the date of signature.

Ordered by:

PAMELA C. CREEDON, Executive Officer

11/3/10

(Date)

